Comparative data and statistics on some Zygaenae of Peninsular Italy.

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ZYGAENA TRANSALPINA, ESP.

The Italian Zygaenae have been made the subject of accurate studies by many entomologists, who have described species, races, and many individal forms. Being in possession of abundant materials I propose to furnish, above all, exact statistics, and to make observations in order to establish, on real numerical bases, the frequency of the particular forms in the races of Central Italy, leaving to Dr. Verity the synthetic comparative study of the same races, and their nomenclature.

The specimens which I possess come chiefly from the following localities, in which my family have collected during the last ten

years :---

1. Florence, Tuscany, Central Italy.—Grassy clearings in the oak coppices of the Pian di Mugnone (600 ft.) and of the Fiesole hills (1,700 ft.).

2. Fonte-buona, Florence.—Meadows on the slopes of Poggio

Conca (1,200 ft.), near Monte Morello.

3. Palazzuolo di Romagna, Tuscany.—Meadows at about 1,000 ft., amongst the oak woods on the slopes of Monte Carsolano.

4. Montefegatesi, Lucca, Tuscany, Central Italy.—Uncultivated

ground on the slopes of Monte Pratofiorito (3,000 ft.).

5. Firenzuola, Florence.—Clearings at about 1,500 ft. above the sea, in the locality called il Palasaccio.

6. Macerata, Marche, Central Italy.—Clearings in the oak woods of Colle Torri (900 ft. above the sea).

- 7. Bolognola, Macerata.—Bare slopes and clearings among the beech woods on the Sibillini mountains (3,600 ft.).
- 8. Formia, Caserta, Campania.—Grassy hills near the Gulf of Gaeta (150 ft.).

9. Pollecca, Caserta.—Clearings among the oak woods on the Monti Aurunci.

10. Villalatina, Caserta.—Meadows and thickets along the road which borders the Mollarino river (1,500 ft.), in the Mainarde hills.

11. Aspromonte, Calabria, South Italy.—Clearings and meadows on the plateau of Carmelia (2,000 ft.).

12. S. Martino, Palermo, Sicily.—Grassy dells among the bare

slopes of Monte Cuccio and Monte Pietroso (2,500 ft.).

I begin with Z. transalpina, which is the most interesting of the Italian Zygaenae, on account of the numerous varieties and individual forms which it produces, and I give the data and statistics of the four varieties of which I possess a sufficient number of specimens.

Zygaena transalpina, Esp. flies at the end of June or in the first days of July at Florence, Fontebuona, Palazzuolo, Firenzuola, Macerata, Polleca, and Villalatina; at Formia it begins to appear in January and flies in March; at Bolognola it first appears in July and re-appears in September. It has not been found in the other localities above mentioned.